

The State Role in Emergency Management: Significant Challenges

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States and the national government have traditionally performed facilitating, not dominating, roles in emergency management. After 9/11, the threat of terrorists on our homeland led to the creation of a new national structure for responding to disasters and thrust the national government into a more dominating role. The state's role within the emergency management system is both complex and unsettled in this new era. The "intergovernmental paradox of emergency management" remains: the governments least likely to perceive the threat of disaster as a very high priority (local governments) are at center stage in terms of responsibility and are limited in their capacity – financial, managerial, technical and political will – to deal with hazards. This places the states into a pivotal role as a capacity-builder through information generation and dissemination roles for their local governments, and, perhaps, regulation. It also means that the states must be ever attentive to their role in relation to that of the national government.

This essay examines the key roles of state government within the emergency management system. These are: 1) the facilitation of local disaster mitigation; 2) assisting the public and elected and appointed leadership in understanding risk and mitigating disasters; 3) building the capacity of first responders by strengthening their preparedness and response capabilities; and 4) paying increased attention to shaping the environment in which the state and local governments operate within the federal emergency management system. Much of the state role is direct capacity-building directed at local governments, citizens, and first responders. Much involves money and legal issues.

Disaster Mitigation

Calling a flood an “act of nature” or a “natural disaster” is largely a misnomer. Floods, hurricanes, tornadoes, wildfires, subsidence, drought, and earthquakes are “natural hazards” but human actions make them disasters. New Orleans, most of which sits below sea level, is a dramatic example of placing people and property in harm’s way. Most Americans live within an easy drive of our hazard-prone coasts and the majority of our communities are located in floodplains, leaving most of us at risk. Especially vulnerable are the poor, who don’t have the transportation to flee harm, money for shelter, and savings to ease unemployment. After a disaster, rebuilding occurs too often without plans that take into account the interdependence of the human-built and natural environments.

At risk from many hazards, both human-made and natural, Pennsylvania is especially prone to flooding, with their toll on lives and property. Even small floods can have significant cumulative damages and public safety impacts. New developments often are not compatible with the floodplain. The National Flood Insurance Program, which offers individual property owners flood insurance, is underutilized for purchasing insurance. Without “teeth” in the local ordinances, or strong enforcement, people and property are left vulnerable.

Dealing with floods requires coming to terms with the intergovernmental paradox. Floods, as is the case with other disasters, are low probability, high consequence events. From the national government’s perspective, floods are a major problem. For the state and local levels, the damages experienced are generally fewer from that level of government’s viewpoint. Local governments are the least likely to perceive of flooding as important and, thus, give the hazard low priority on the agenda – until an event occurs.

Structural vs. Non-Structural Mitigation Options

Urban development over many decades has exacerbated the flood problem, with the rate of urban growth in floodplains far exceeding that of other areas. It is not nature that is changing; instead, people make the environment more prone to catastrophic events and themselves more vulnerable to disasters. Traditional public policy attempts to keep floods away from people and property through costly flood control structures

(dams, reservoirs, dikes, levees, floodwalls, channel alterations). Flood prevention can result from these structural options, which are heavily funded by the national government. Structural options are not always reliable – levees can be topped and breached and dams can break. Once structures are built, a false sense of security results, especially when maintenance and monitoring are neglected. Despite many successful structural projects, they can encourage encroachment in other areas, leading to progressive invasion of floodplains and relentless growth of per capita flood losses.

A different policy approach, based upon the realistic understanding that floods are inevitable, aims to use cost-effective measures to keep people away from waters that may flood. Nonstructural options include regulations, education, financial incentives, and technical assistance. Examples are zoning and other land use regulations, elevation and other flood proofing of buildings, flood insurance, flood warning systems, land acquisition, permanent property relocation, and improved disaster preparedness and response planning. Such options aim to reduce the flood hazard for people and property, with a commitment to long-term management of all factors that affect flood risk.

A balanced approach toward floodplain "management" through a wise combination of structural and nonstructural, cost-effective options is slowly replacing flood "control" as the dominant philosophy. If owners of buildings in a floodplain assume that risk is minimal and that the costs of flood proofing through elevation of structures is too high, damages from the inevitable flood will increase. If flood warning systems or evacuation routes are neglected, a failed levee or reservoir may have catastrophic consequences. Floodplain management means that local governments acquire wetlands to serve as natural flood basins and require builders to create detention areas for flood waters. Land uses that are compatible with the floodplain and occasional flood, e.g., parks, ballfields, greenways, can occur in the floodplain and some floodplain can be preserved. Floodproofing requirements (privately constructed detention ponds and placement of buildings on piers) can also help steer development away from floodprone areas.

Sound land use techniques are an alternative to costly structural options for flood prevention. Locating people and property away from harm outside of the floodplain, raising structures on stilts, using floodplains for uses compatible with floods (such as parks that can dry

out and not houses to be destroyed by water, mold, and seepage of toxins), and using stringent building codes are examples. Local governments are most responsible for sound land use policies but weakest in capacity, especially political will. It is in the area of hazard mitigation that the “intergovernmental paradox” is most disconcerting. And, this is the area in which proactive states can have considerable impact. Damages caused by natural hazards are inevitable but losses of lives and property can be reduced. Policymakers need to plan to make the human-made and natural environments work together to improve quality of life and public health in equitable ways. The American public may be tiring of having its federal tax dollar pay for repetitive flood losses. We may be moving toward a time in which the state and local governments have little option but to get more serious about land use measures to mitigate losses.

Natural disasters are inevitable but losses of life and property can be reduced. Policymakers need to plan to make the human-made and natural environments work together to improve quality of life and public health in equitable ways. The state role in mitigation is pivotal. Most local governments are small and have relatively limited technical and financial resources, including that for public planning. The states can serve as information generators and disseminators, as well as regulators (requiring building codes), if that need is perceived.

Public and Leader Preparedness

A major part of preparing the public for disaster events is to develop a realistic view of risk. Human tragedy resulting from a disaster event is often caused by the failure of so many to evacuate the affected area. Some people don't hear about an evacuation order. Some are too sick to comply. Others are without transportation. A small number simply refuse, not wanting to leave their homes. They may be fearful of losing their possessions due to the impending emergency or because of anticipated looting. Some not leaving may feel secure. Others may have had a negative evacuation experience previously and think they know the community and its risks but underestimate them.

Mandatory evacuation orders are difficult to implement in our democracy. Quarantines during a pandemic may be even more problematic. Some communities use innovative approaches to implement

evacuation orders, such as the “Magic Marker” strategy of giving residents a marker and telling them to write their name and social security number on their bodies so it will be easier to identify fatalities. The “Good Samaritan” approach expects and urges the most able to take care of the aged, the disabled, the very young, the poor, etc. Government’s ability to quarantine effectively on a large scale has not been tested.

At a time when we must protect against both natural and human-made disasters, risk perceptions significantly shape policies. Alarm about terrorist-induced emergencies leads to reluctant sharing of evacuation plans fully with the general public. A more balanced approach to secrecy and security needs requires educating the public fully about plans and working toward their implementation. Many people misperceive risks from hurricanes and/or floods, which are a greater threat than winds from hurricanes. Our national government pursued policies after 9/11 that mitigated against and prepared for terrorist events more than for the more typical disasters, such as floods that have taken the most lives and destroyed the most property.

Governments and people underestimate some risks and overestimate others. An important state role is to provide accurate information to citizens and to elected and appointed officials about the nature and types of risk for which citizens are most vulnerable. Pennsylvania’s residents should know what hazards exist in their area and have a sense of which are most threatening. As with mitigation, the state role in information generation and dissemination is paramount.

As a nation, we do not have a strong track record in perceiving risks: we are getting more obese and fail to link weight gain to adverse health impacts. Cigarette smokers often don’t perceive the link between their habits and the risk of lung cancer. Misperceiving risk, many people habitually drink alcohol and drive. Many motorcyclists choose to drive without helmets. Our credit card-dependent society has checkbooks that don’t balance, empty savings accounts, and increased bankruptcy declarations, in part because economic risks are misperceived. Americans typically don’t save adequately for their retirements, not linking living longer to having less financial means. More Americans than ever live misperceived risks and live in hazard-prone areas. Floodplain dwellers often don’t purchase floodplain insurance. Those aging usually don’t purchase long term care insurance.

Risk perception is influenced by experience and education. Members of the general public are usually the “first responders” in an emergency, either as victims or helpers. Each of us has primary responsibility for ourselves, having to balance our rights with our responsibilities. In our democracy, we have choice over most of the decisions we make. One of the most useful actions we can take is to know our risks and decide how we will deal with them. State government plays a significant role in using its capabilities to measure risk accurately and to convey risk in language understandable to the general public.

State government can take care to structure its emergency management operation to avoid neglect of disasters tied to natural hazards, compared to the more infrequent human-made terrorist-related disasters. Post-Katrina, the national government was strongly criticized for placing the Federal Emergency Management Agency (FEMA) within the Department of Homeland Security and removing its preparedness responsibilities, cutting budgets and personnel, and failing to appoint professional emergency managers to high levels of responsibility, including direct reporting to the President. While many of the failings have been reversed, the states need to reconcile their organization for handling homeland security issues, broadly defined to include national security and natural hazards.

Building the Capacity of First Responders

During catastrophic events it can seem as if everyone is in charge but working at cross-purposes. In reality, there is no “one” in charge. Multiple and diverse people and entities are part of disaster response and intergovernmental and intersector coordination and collaboration are necessary but difficult, especially due to the need for quickness. Lost responsibility and lost accountability result. In the years since Hurricane Katrina, much attention has rightly been devoted to improving the intergovernmental response mechanisms to disasters. While all disasters occur locally and the initial response is local, large scale disasters require well planned and coordinated actions among a myriad of actors at all levels.

Preparedness and Risk

The “first responders” in a disaster are typically characterized as local law enforcement officers, firefighters, and emergency medical personnel. Yet, it is the victims caught in the disaster, or those who assist them, who are the very first responders. They must be prepared to take major responsibility for the first response to a disaster event. Local police, fire, and emergency medical personnel must be prepared to take major responsibility for the first 24 to 72 hours of a disaster event. Specific actions of potential disaster victims include completion of first aid training; developing an evacuation plan for leaving one’s home in an emergency; having a disaster supply kit with water, food, medicine, and other supplies; selecting a person who lives outside of one’s geographic region whom family members can contact if they become separated after an emergency; and establishing a specific meeting place to reunite in the event that family members cannot return home.

We tend to neglect the need to educate individuals and families both about the risk of disasters and how they might help when one strikes. We also tend to overlook the first responder role of planners and policymakers who can change the relative threat of disaster. Similarly, we neglect the role of the private sector entities that own approximately 85% of a community’s infrastructure and we pay inadequate attention to the roles of the large and diverse non-profit community. For all of these actors, the states, once again, can play major roles in information generation and dissemination, and in bringing actors together.

Americans now have their lowest fear of terrorist’s attacks since 9/11. A Readiness Quotient survey conducted for National Preparedness Month in September 2008, found that on a scale of 1 to 10, the nation’s collective level of preparedness or Readiness Quotient (RQ) decreased from 4.14 the prior September to 3.57 (<http://www.whatsyourrq.org/>). The Council for Excellence in Government developed the online RQ test to measure our readiness quotient. Americans are not prepared for water shortages and fuel shortages or for a disaster of any kind. Relatively few have a specific plan for evacuation and claim to have no supplies for an emergency. Only 36% of respondents claim to have a disaster supply kit in a designated place. Just 32% have made a communication plan to keep in touch with loved ones in case of emergencies. Only 27% have set a meeting place for family members in case they get separated by a

disaster. Only 48% know whether their local government has an emergency or disaster plan.

Business can play an important role in public preparedness. The RQ survey shows that employees are better prepared if their employer has a plan and has practiced that plan. If the employer had a plan, individuals had an average RQ score of 4.0. Those who either didn't know if their employer had a plan or whose employer didn't have a plan had an average RQ score of 2.7. Seventy-three percent of employees reported that their employer has an emergency plan. Of those, 65% practiced the plan in the last year. Schools and daycare centers play a strong role in public readiness and parents are better prepared if their children's schools or daycare centers have a plan that is practiced.

The U.S. Center for Disease Control and Prevention promotes a range of "Readiness Initiatives" for cities in public health emergencies. In recent years, the White House has promoted the fostering of a Culture of Preparedness to permeate all levels of society so that families, businesses, and government agencies make emergency planning a routine concern. Most people, however, think that they can judge the risk of prospective hazards accurately and, thus, don't take the necessary precautions. Even when people live close to major hazards, they may not take an interest in preparedness. Post-9/11 and post-Katrina, half of survey respondents in an N.Y.U. Center for Catastrophe Preparedness and Response study in October 2005, said that their level of preparedness was about the same as before 9/11 and 4 percent claimed to be somewhat or much less prepared. After Katrina, many Americans lost confidence in government's ability to assist in crises. A 2006 N.Y.U. survey found 50 percent of respondents saying they have an emergency supply kit in their homes but only a third of those had enough food and water to last three days. Half of the respondents said that if they had to evacuate they would drive or take a taxi, despite frequent warnings about gridlock. Thirty-six percent claim to have no household emergency plan at all and no way to reunite with family or friends during a crisis.

Personal preparedness can – and must – be facilitated by government. State governments, especially, can work to build the capacity of businesses, schools, daycare centers, local governments, and individuals to prepare for emergencies by designing and providing emergency kits, reviewing plans, and any of a number of other facilitating, enabling behaviors. At the mitigation or prevention stage of a

disaster responsibility and accountability, problems arise long before a hazard creates a disaster event. This can mean the difference between an emergency and a disaster of catastrophic proportion.

Legal Issues

There are several major areas of concern regarding national/state, interstate, state/regional, and state/municipal relations in emergency management that need continuous attention from the states. These include: 1) sorting out what a catastrophic disaster is; 2) sorting out who does what and when; and 3) the role of the military in supplementing the states.

Catastrophic Events

Planning for emergency response too often is based on the last disaster and not the next one. This is why so much attention has to be paid to improvements based on after-action reports and studies of preparedness and response. A pre-condition however, is the need to sort out what authority is appropriate and applicable for each level of government in a catastrophe. Only after doing that can unresolved issues involving communication and coordination problems during response, and recovery, be addressed.

The magnitude of a threat, the vulnerability to communities and to the state and nation, and/or the consequence of the disaster in terms of lives and property lost or national security should be of the highest concern in shaping the emergency management system. A significant but little debated consideration is the threshold of severity in terms of size, scope, nature, and consequences of a disaster event that should define when the national government should have greater authority. During the Katrina response, the laws and regulations among and between governments involved were poorly understood and communicated, confounding the response. States and the national government were at odds, for example, over what was requested by the states, what was possible, and what the conditions of aid would be. The public and media commentators were confused over the responsibilities and authorities of the military and federal officials.

Who Does What Before and After the Disaster

By design and necessity, dealing with emergencies involves complex relations among all levels of government in sharing responsibilities. Cooperation is needed along vertical lines (national-state-local) and along horizontal lines (municipal-municipal, regional). Leadership that builds collaborative relationships in our decentralized governance system is required. We expected a greater role for the national government in the Katrina disaster, especially through its broad authority to respond to a major disaster through rapid deployment of "key essential resources," including medical teams and supplies, food and water, transportable shelters, and urban search and rescue teams.

Just as the federal role is unsettled for catastrophic events, no single federal agency has a clear legal mandate to organize the rebuilding or repair of public housing, federal subsidized rentals, or other affordable housing. FEMA has more of a mandate and money than the Department of Housing and Urban Development (HUD), but little expertise. On the other hand, HUD has expertise but no legal mandate. The Stafford Act of 1988 gives FEMA responsibility for housing 18 months after a disaster declaration but a truly catastrophic event such as Katrina required a much longer period, especially because low income housing tends to be older, less sturdy, and not retrofitted, compared to other housing. Just as the nation attempts to sort our roles and responsibilities among national actors during recovery, the states need to ensure that such parallel functions have been sorted out at the state level.

Interest in hazard mitigation has risen with the rising costs of natural hazard events. With the Disaster Mitigation Act of 2000, Congress sought to establish a national hazard mitigation program to reduce the loss of life and property, human suffering, economic disruption, and resulting disaster assistance costs from natural hazard events, as well as to provide pre-disaster mitigation funding to assist states and local governments in implementing mitigation measures. Other measures to improve state and local hazard mitigation planning were established. FEMA plays a central role in hazard mitigation through its grants programs and through various capacity building efforts. A number of other federal agencies such as the Department of Interior, Department of Agriculture, Department of Commerce, and the Corps of Engineers, have responsibilities related to natural hazard mitigation. The states play a central role in facilitating sound hazard mitigation policies at that level

and with their local governments, and must work to establish the appropriate relationships with the myriad of agencies involved in mitigation.

The Department of Homeland Security (DHS), through its Urban Area Security Initiative (UASI) regions, requires multiple jurisdictions within a region to jointly administer federal funds for police and fire, for example. In years past, funds were used for purchasing equipment but some UASI districts, beginning in fiscal 2008, can be used only for planning. States can play an important role in helping to establish mechanisms that allow for joint action via a coordinated response.

The Emergency Operations Center (EOC) is central to the communication system needed for response. A longstanding barrier to the flow of information that ensures timely situational awareness and allows strategic and tactical orders to reach the appropriate people in timely ways is interoperability. In part, this is a technical problem that is being increasingly addressed by the federal government. Interoperability also requires effective coordination across diverse agencies. Law enforcement and intelligence units have been working to share information and tighten coordination since 9/11 through fusion centers. Among many of the nation's 60 fusion centers, all hazards approaches are being embraced. There is no one model for a fusion center's structure but data fusion through the exchange of information from various sources and then analysis turns information and intelligence into actionable knowledge. Pennsylvania state officials would be wise to think comprehensively about the types of information they need in the developing fusion center – antiterrorism intelligence, general law enforcement, weather reports, etc. Technological sophistication can move available information and analysis to new levels and deal with multiple hazards missions.

Military-Civilian Relations

After 9/11, the Department of Defense (DOD) needed a more integrated military response to an attack on the homeland. The U.S. Northern Command (NORTHCOM) was established in October 2002 to provide command and control of DOD homeland defense efforts and to coordinate defense support of civil authorities. While DHS is the lead federal agency for homeland security, DOD is the lead federal agency for

homeland defense, defined as the protection of United States sovereignty, territory, domestic population, and critical defense infrastructure against external threats and aggression against the United States contributes through its military missions overseas and homeland defense and civil support operations. The current National Response Framework involves a stepped series of responses to a disaster, beginning with local authorities, state authorities, and outside assistance from other states. When those capabilities are exceeded, federal assistance is involved and the DOD might be asked to provide assistance. NORTHCOM's area of responsibility includes all 49 states in North America and the District of Columbia and it works with other DOD organizations

NORTHCOM is hampered in executing its plans because DHS and the states have not provided the necessary information. For example, as of mid-2008, NORTHCOM had not systematically reviewed state emergency plans. Few regularly assigned military forces have traditionally been assigned to NORTHCOM and it has difficulty monitoring the readiness of military units for its civil support mission. Neither the DOD nor the states, in fact, have fully determined the National Guard Bureau's (NGB) requirements for civil support operations in the United States. In the short term, reform is necessary to increase coordination among DOD entities and commands, including the NGB and NORTHCOM, to ensure better national security outcomes.

Planning and funding for civil support missions of the National Guard (NG) have traditionally been considered a state responsibility, although the war fighting capabilities provided to the NG are facilitative. Since 9/11, the NG has been in a key role in responding to catastrophic natural disasters and for homeland security-related events of national significance. The state and federal government have a shared interest in preparing the NG to conduct civil support missions. There is a need to integrate not just the response to an incident, but also the plans of many entities at all levels involved in responding to such incidents. The states need to better coordinate with NORTHCOM and the NGB on a process for requesting, obtaining, and using information on state emergency plans and capabilities.

Perhaps the biggest issue regarding the interface between the military and the state EM community relates to NORTHCOM's most recent plans. By 2011, the United States military hopes to activate and train an

estimated 20,000 service members for specialized domestic operations, under the direction of NORTHCOM. One unit became operational on October 1, 2008, with two others expected to be equipped and assigned by 2011. Already, there are about 80 National Guard and reserve units, with a total of 6,000 troops, in support of local and state officials nationwide. All of these and the NORTHCOM units are to be trained to respond to a domestic, chemical, biological, radiological, nuclear, or high-yield explosive attack (CBRNE).

During Katrina there was substantial confusion regarding its role, including a slow response. NORTHCOM's units are intended to assist in responding to terrorist attacks or disasters stemming from natural hazards. The units have unique training in logistics and medicine and consist of medical personnel, chemical decontamination experts, logistics, and engineering personnel. Groups concerned with guarding civil liberties, and libertarians, are uneasy about how closely the military will be involved with law enforcement issues falling under a state's jurisdiction, possibly undermining the 130-year federal law that restricts the military's role in domestic law enforcement, the Posse Comitatus Act. Some claim that the new homeland emphasis may strain the military.

The Obama Administration will have to sort out a clearer mission for NORTHCOM during catastrophic events and the role of the National Guard as a support unit to civil authorities. Funding for the changes is still unclear. The Posse Comitatus Act, as well as numerous powers and authorities of the states and national government, will likely be revisited in the near term to forge the role of the military in disaster response and recovery.

State policymakers must take a proactive role in this debate. Underlying the role of the military in supplementing the states during a disaster is that the threshold for military action is unsettled. The magnitude of a threat, the vulnerability to communities and to the nation, and/or the consequence of the disaster in terms of lives and property lost or national security should be of the highest concern in shaping the EM system. As discussed here, many of the key issues among and between governments in terms of the threshold of severity – size, scope, nature and consequences of a disaster event – that should define if and when the national government should have greater authority – or the military are unsettled. This is an area ripe for state interest and action.